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Original Communications.

NEURASTHENIA.

By T. W. FISHER, M.D., Boston. Read before the Boston Society for Medical Observation, Jan. 15, 1872.

I WILL offer the Society a few notes upon a class of cases which, although frequent, are difficult to include under any definite name. They all exhibit a variety of symptoms due to functional nervous disorder, and are provisionally classed as cases of neurasthenia.

CASE I.—Mrs. A., 30, married, with two children living. Was formerly treated by Dr. Bowditch for nervous dyspepsia and asthenia. When I first saw her, Oct. 17th, 1870, she was thin, pale and weak, but ambitious to keep about her household duties, in spite of increasing disability. The winter before, she had suffered from severe neuralgic headache in the frontal region, with hemicrania of the right side of the head, the pain extending to the neck. Was afterwards much troubled by palpitation of the heart, with mental agitation and fear of death. Sleep had of late been so interfered with that she feared insanity. The intellect was, however, clear, and the mind only disturbed by such apprehensions as are common with an irregular action of the heart. The eyes were bright, and the speech hurried, but nothing resembling hysteric crises were reported or noticed. Neither was there any settled gloom, but an alternation of feeling evidently dependent on variations in her physical condition. Was very susceptible, however, to the influence of moral causes, of which fact frequent advantage was taken in her treatment.

On inquiry and examination, found no reason to suspect any local organic disease of any kind. Suggested a more critical examination by Dr. Bowditch, but patient dreaded it, and it was not insisted on. Appetite was fair and digestion good. No constipation existed, and menses were regular. The menstrual flow had formerly been

very abundant, but leucorrhœa had followed a diminution of quantity.

The most remarkable symptom noticed at this time was a small and quick pulse of 120, indicating an irritable state of the heart. Absolute rest in bed was not enjoined at this time. Elixir ferri phos., calisaya et strychnia, \mathfrak{z} i ter in die, was ordered, with chloral hydrate grs. xv. at bedtime, preceded by a mustard foot-bath. Free diet, with wine at dinner.

Oct. 24th.—No marked change. Patient wakes at 4 o'clock, A.M., with an intense headache, which persists till breakfast. It is sometimes cured by rubbing the forehead persistently. Hot water to the head relieves it, but the use of chloral at bedtime so distinctly aggravates it she cannot be persuaded to continue its use.

Oct. 29th.—Has had a mild attack of asthma, with catarrhal symptoms; pulse still 120. Ordered pills of zinci valerian. grs. ij., ext. belladonna gr. $\frac{1}{2}$, morning and night.

Nov. 1st.—Came in town without permission yesterday, and felt very sick and confused, with dimness of vision. Find belladonna has produced dilatation of the pupils and suffusion about the eyes. Pulse 120, but volume increased. Headaches are worse of late. Rest in bed ordered. Tonic omitted. To take half a pill ter in die, with potass. brom. grs. xv., and extract. fl. valerian. \mathfrak{z} ij. at bedtime. Wine for luncheon.

Nov. 5th.—Sleeps better. No headache. Eats well; bowels regular; tongue, thin fur; pulse 110.

Nov. 7th.—Has dull headache in afternoon; pulse 108. Weak and dizzy on rising. Omit pills and resume tonic.

Nov. 9th.—Sleeps quietly and has no headache or palpitation. Pulse 120 again.

Nov. 12th.—Has asthmatic dyspœa in evening. Bowels getting costive. To use injections and resume pills, one half ter in die, omitting tonic.

Nov. 16th.—Asthmatic dyspœa continues. Ordered the Espic cigarettes, composed of belladonna, hyoscyamus and stramonium in leaf, with extract of opium.

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Nov. 19th.—Quite comfortable, except for asthma at night, requiring a semi-recumbent position and preventing sleep. At this time omitted all medicines previously ordered, and began a trial of liq. potass. arsenitis gtts. vi. ter in die, with ext. fl. hyoscyam. ℥ xv. at bedtime, and repeat if required.

Nov. 26th.—Asthma at night gone. Sleeps better, and sits up in the forenoon.

Dec. 30th.—Improving in health and spirits. Up nearly every day. Pulse still 120.

Jan. 5th.—Had an attack of asthma after a short sleigh-ride. Relieved by inhalations from the atomizer of ext. fl. hyosc. 3ss., tinct. opii camp. ʒi., tinct. lobelia 3ss., in an ounce of water.

Jan. 12th.—Asthma entirely gone, but bronchi are filled with a copious secretion, which keeps patient awake by its rattling in chest and larynx. Relieved at once and entirely by ammonia chlor.-hyd. grs. x., glycerine and tinct. opii camp. aa ʒi., in an ounce of water, inhaled from atomizer.

Jan. 19th.—Asthmatic dyspnoea continues. Pain in head on awaking so intense as to make her unwilling to go to sleep. Omitted Fowler's solution, and ordered potass. brom. grs. xv., ammon. brom. gr. v., between meals and at bedtime; quinine gr. i. before meals.

Jan. 25th.—Better every way. Pulse 100. Has been to ride.

Feb. 18th.—Has had moderate dyspnoea and headache in the morning more or less for the past month. Increase the bromides one half.

March 7th.—Quite free from headache and asthma the past month. Sleeps and eats well. Goes to ride occasionally. Pulse 120.

March 13th.—Asthma returned with great severity last night. Much relieved by potass. iod. grs. x., tinct. belladonna ℥ xx., spts. ammon. arom. 3ss., every four hours, inhalation of cigar smoke, turpentine stupes to chest and strong coffee.

March 16th.—Up and doing well.

March 24th.—Doing well. Pulse 80 for the first time since November.

May 1st.—Attack of asthma controlled as before. Pulse 120.

This patient spent the summer at Wolfboro', and was free from asthma. Had palpitation at times, but improved in health and spirits very decidedly. Was greatly discouraged by an attack of asthma on her return, in September. Was sent to Baltimore, Oct. 1st, to spend the winter, and was much cheered by the prospect of relief. Pulse 120, when she left Boston.

In a letter dated Jan. 15th, this patient

writes:—"If it were not for my nerves, I should think myself almost well. I have no such terrible attacks of asthma as I had at home. I am pressed for breath very often, but have nothing so serious that my pastiles will not relieve. For the past three or four winters, I have had a cold and a cough most of the time, but this winter I have been entirely free from such troubles. I have gained 13½ pounds since I came."

In reviewing this case, it is necessary to notice first, the inherited tendency to nervous instability, the patient resembling her mother in this respect. There was, however, no special tendency to that form of functional disorder in the convulsions which we call insanity. A generally anæmic state was apparent, and had existed for some time, depending on a feeble nervous constitution and a menorrhagic habit, and, later, on maternity and its results. Nutrition had been impaired also, as shown in previous dyspepsia and loss of flesh. There was a condition of special nervous exhaustion, when first seen, due to voluntary over-exertion.

The asthma was a severe and persistent symptom, but the local instability of that disease seemed to arise from the general state of nervous exhaustion. This symptom was sometimes excited by exposure and accompanied by catarrhal signs, but at others occurred independently, as far as could be ascertained, of any such cause. Asthma is generally conceded to be a pure neurosis, dependent on a diathesis often transmitted from the parent. There is an instability of motor centres supplying the lung through the pneumogastric, which Handfield Jones compares to that of the medulla in epilepsy. There is in both diseases a tendency to reflex spasmodic action, excited by some evident sensory irritation, or by influences too subtle to be detected. That the vaso-motor centres share the irritation in both, is shown by the cerebral anæmia followed by congestion in one, and the dryness of the bronchi followed by copious secretion in the other. In fact, the latest theory assigns the primary disorder in epilepsy to the upper cervical sympathetic ganglion.

The heart's action in this case showed that its sources of nerve supply were also involved. The persistently rapid rate of the pulse, as well as the slight asthmatic dyspnoea, seemed to depend on continued nervous irritability, and not on any evident organic lesion of heart or lungs. The lower cervical sympathetic gives rise to the "accelerator" nerves, so called, and may

have been efficient in keeping up the pulse, or moderate irritation of the pneumogastric may have produced the same effect.

The treatment was largely empirical, and is not put forward as a model by any means. Calculations of the causes of symptoms and of the effect of remedies were continually upset by the severe attacks of asthma, which demanded instant relief and necessitated frequent changes of treatment.

CASE II.—Mrs. B., 30, widow. Always subject to sick-headaches, as was her mother before her. Is of a nervous, sanguine temperament, in very good flesh and color. Menses regular in time, but excessive in quantity. Had several attacks of diarrhoea in summer of 1869, during a vacation in the country, and has felt weak and spiritless since her return. Is seldom constipated. Menstruated Nov. 1st, and has had headache since, with complete anorexia and occasional nausea.

Find her in bed Nov. 6th, after a sleepless night. Complains of severe pain, confined, as usual, to a spot in left temple, generally worse in the morning, with sometimes tenderness of the scalp. Face neither pale nor flushed. Tongue has a thick white fur; temperature under it, $99\frac{1}{2}^{\circ}$. Pulse very slow, small and irregular, 45 per minute. Heart-sounds over aorta accented as follows: 1'—2—3—4'; and then as usual, 1—2—1—2'. Had palpitation last summer, but none of late. On sitting up, pulse rose to 84, with more volume, but still irregular at frequent intervals. Ordered elixir ammon. valer. 3i.

Nov. 7th.—Headache relieved. Says the elixir "takes the sharp edge off the pain." Pulse 76, and intermits every fourth or fifth beat. Temperature 100° . Ordered elixir ferri phos., calisaya et strych. 3i. ter in die.

Nov. 9th.—Much better. Sits up. Pulse 76, and regular. To take Angelica wine at luncheon and for dinner.

Nov. 21st.—Has improved in strength and appetite, but has headaches every few days. Now in bed from a cold, with headache. Sleeps badly. Pulse 76 and regular. Ordered potass. brom. grs. xv. at bedtime every night, and double the quantity when headache impends. Has tried chloral hydrate, with aggravation of pain, and will not take it again.

Nov. 27th.—Gets no relief to headache from bromides. Omit tonic, and take pills of zinci valerian. gr. ij., ext. belladonna gr. $\frac{1}{4}$, 1 ter in die.

Dec. 29th.—Much improved, and is able to attend to business as instructress and book-keeper in sewing-machine establish-

ment. Loses a day now and then from headache, which is always much relieved by the valerianate of ammonia.

This patient was quite well till spring, when whooping cough seized her and lasted through her summer vacation. Came to the city discouraged and unfit for business. Quinine, gr. i. before meals, was ordered. Rum and milk in the morning, a daily lunch of beef-tea or oysters, with wine at dinner, and ice cream during sick-headaches. Gained 18 pounds this fall, and is now quite well, except for occasional headaches.

The tendency to headache, with nausea, was inherited in this case. It was also fostered by various sources of cerebral exhaustion in the individual, both recent and remote. The attacks occurred under such a variety of circumstances as to make it difficult to assign any special exciting cause. They did not seem to depend directly on disorder of the stomach, the reflex irritation being as likely to end as to originate there.

The slow and irregular action of the heart was a marked feature for a short time, and may be attributed to an excessive cerebral irritation acting through the pneumogastric. This nerve, by its unexplained moderating power, seemed to act as brake upon the heart, at the same time disturbing its rhythm, as a car, to use a rough illustration, rubs and jumps along, when the brake is applied. On sitting up, the propulsive forces for a moment got the better of the retarding ones, and the pulse rose from 45 to 84. Whether this was due to change in the cerebral circulation from the new position, or to the equalizing effect of emotion which the patient exhibited just then, is doubtful.

CASE III.—Mrs. C., æt. 55. Is of a full habit, and formerly had a menorrhagic tendency. Has had much domestic trouble, and for 15 years has been subject to spinal neuralgia and hysterical attacks. Has recently endured much fatigue and anxiety, in consequence of the departure of her family for Europe, leaving her alone.

Aug. 14th.—Was called to take charge of her in place of her own physician, whom she had ignominiously dismissed. Found her suffering from an aggravation of her former usual symptoms, with great mental disturbance superadded. Said she had been frightened by a person in the street, whom she dreaded to see. Last night, threatened suicide, in a frenzied way, and attempted to jump from the window. Chloroform had been used, by friends, at her request, and insistence to the extent of four or five pounds in twenty-four hours.

At the time of my visit, she was surrounded by sympathizing acquaintances, and was groaning and breathing noisily, as if in great agony. Looked wild and haggard. Wrings her hands and twists and writhes on the floor. Calls the attack "her spasms," and says her "rubbing doctor" always cured them easily. Complains of great pain at the sacrum and between the shoulder-blades. Find well-marked tenderness at these points. Tongue is furred, and complains of nausea. Vomits occasionally. Bowels said to be regular. Has at times an increased flow of urine, at others dysuria. Pulse 120, small and weak, as near as can be determined for the constant trembling and writhing of the patient. Ordered rest in bed, instead of the floor or lounge. Beef-tea $\frac{3}{4}$ viij. every 6 hours in the 24, with capsicum grs. x. each time. At 10 o'clock, P.M., chloral hydrate grs. xxx., and grs. xx. if no sleep at 12. Rub back in rum and chloroform. Hot water to feet.

Aug. 15th.—Rather more quiet. Symptoms generally ameliorated, but has attacks of "spasms" whenever a new nurse or acquaintance appears. Sympathy of a certain kind calls out increased exhibitions of distress. Says she sees "faces," and that people are "hammering her back."

Aug. 16th.—Less nausea. No talk of faces, &c. Find patient has been using stimulants too freely by consent of friends. Has also managed to get too much chloral, and breathes the chloroform in her liniment. Change nurse again. Keep friends away, and lock up all medicines.

Aug. 18th.—Bears beef-tea well. Is slowly gaining. Sleeps moderately well. Cannot trust patient's account of herself at all. Has occasional "spasms."

Aug. 19th.—Another change of nurses; previous ones being afraid or unwilling to stay. Obtain one experienced in the care of the insane. Had a bad night in consequence of change. Omit capsicum. Ordered belladonna plaster to spine at tender points; also a pill of zinci valerian grs. ij., extract belladon. gr. $\frac{1}{4}$, ext. gentian gr. i., ter in die.

Aug. 20th.—Had a quiet night and slept tolerably well. Eats well.

Aug. 21st.—Received a letter last evening, with disagreeable news. Became delirious, and tried to leave the house "to get into the pond, and stop the wheels in her head." Said she would kill the nurse if she did not let her go. Pulse 120. To receive no letters at present. Mustard

foot-bath at bedtime. Egg, milk and wine at midnight, instead of beef-tea.

Aug. 22d.—Slept after second dose of chloral. Usually sleeps late in the morning. Wants and may have a beefsteak.

Aug. 29th.—No decided change the past week. Patient is wakeful and complains of pain in the spine at night, but sleeps by day. Chloral has but moderate effect, but refuse to increase the dose. Patient once gets the bottle and drinks an unknown quantity. Teases for narcotics and stimulants. Bowels regular; tongue clean; pulse 108, but easily raised by emotion to 120.

Aug. 30th.—Says she is better. Does not want to see friends till she is well. Omit pills, and give ferri pyrophos. grs. v., quinine gr. i. ter in die. Whiskey $\frac{3}{4}$ i. every six hours in twenty-four. Warm bath at bedtime every other night.

Oct. 1st.—Quite well, except for weakness. Has been to ride. Expresses her gratitude for attentions of nurse and physician. Sent into the country.

Dec. 1st.—At home, and family returned, to whom she "says the thing which is not" in regard to her treatment. Complains of personal abuse, and of being forced to take stimulants and chloral against her will.

It will be noticed that the symptoms in this case, though differing widely from those in the others, are based on a similar condition of nervous exhaustion. The so-called hysterical attacks made their appearance before the turn of life, in connection with a menorrhagic tendency, which is often both a consequence and a cause of failure of nervous power. Menorrhagia perpetuates and aggravates the nervous debility in which it originates. Nervous exhaustion had been still further increased by domestic misfortune and losses of property, and the attack in question occurred under special fatigue, anxiety and fright.

In addition to the usual symptoms of spinal irritation, or spinal neuralgia, as it is perhaps more suitably called, there was an increase of the emotional disturbance amounting to mania of the hysterical form. It may be suggested that these symptoms were all dependent on uterine irritation, and that the mental disturbance was reflex. I am more inclined to look on this case and on others like it as due to bad nervous habits, set up and confirmed in nervous centres, which have been for a long time exhausted or badly nourished. As far as my limited experience goes, uterine disorders, of a functional kind, at least, more frequently depend on the state of the nervous

centres than the reverse. It would have been unwise to have insisted on a local examination in this case, and the result justified this forbearance.

In this case, a wide range of nervous centres was involved—motor, sensory and emotional. The brain, heart, stomach and bladder were functionally disturbed. The "spasms" were not altogether involuntary, and consisted in irregular motor responses to extreme pain and to emotional excitement. The pain seemed to be that of spinal neuralgia, and the tenderness was analogous to that which occurs in hemiplegia.

How far the nausea, gastralgia and dysuria depended on local irritation in the cord is doubtful. The latter symptom seemed to be purely nervous, while the former subsided under the use of capsicum very soon after the treatment began. The sacral tenderness, however, was more marked than that in the dorsal region. Dyspepsia and præcordial pain are frequently accompanied, in my experience, by dorsal pain and tenderness. I have not noticed the connection between nausea and cervical tenderness, of which Dr. Hammond speaks, but have often met with the latter symptom alone. Dr. Hammond asserts with great positiveness that spinal anæmia is the cause of spinal irritation, and that functional disorders occur in organs deriving their nerve supply from those parts of the cord affected.

Whatever the local condition of the circulation in the cord, there was no doubt in this case a generally anæmic state of the nerve centres. The emotional instability was evidence of imperfect nutrition and irregular blood supply in the convolutions. It seems probable that the blood supply in these cases fluctuates from time to time, and even from moment to moment, as we see the optic disc flush under the stimulus of an ophthalmoscopic examination. It is, therefore, probable that more permanent results will be obtained from a tonic treatment than from attempts to adjust our remedies to temporary conditions of the vaso-motor system.

The effort was made in this case, after excluding all sources of disturbance, physical and moral, to improve the nutrition and equalize the circulation throughout the nervous system. Rest, strong beef-tea at regular intervals night and day, with capsicum instead of alcohol, seemed first indicated. Belladonna was given for its relaxing effect on the bloodvessels, tending thereby to prevent local anæmias, and zinc for a nervous tonic. These means were relied upon to quiet irregular action, allay pain, and

promote sleep, instead of remedies more directly anodyne and hypnotic. Chloral at night was used in small doses, partly for its proper effect and partly to satisfy the patient's mind, the exact quantity being carefully concealed from her. The patient had from the outset sought the immediate relief of narcotic doses of chloral, chloroform and alcohol, which increased her sufferings greatly in the end. This fact was fully explained to her, and received her intellectual assent, but did not prevent a craving for instant relief, even at the expense of narcotism.

After the more urgent requirements of the nervous system had been supplied, the slower acting tonics were found of benefit. The misrepresentation of facts after recovery is not an uncommon event, and depends partly on recollection, confused by former or present disordered feeling, and partly on a dulness of the moral sense peculiar to hysteria.

I will briefly mention a few cases of a less acute character, imperfectly observed, but which exhibit symptoms depending on a local or general failure of nervous power.

CASE IV.—Mrs. D., widow, 42. Says she inherits scrofula and rheumatism. Thinks she has had a spinal disease from childhood. Always had a menorrhagic tendency. Is habitually costive, with occasional diarrhœa. Has been treated for "ulcers of the womb," and has worn pessaries. Says husband's recent death by suicide gave her a great shock. Suffers much from beating of the carotids, hemiplegia, sub-orbital neuralgia, loss of energy, prickling in hands, restlessness, and at times spasms.

Is in good flesh, but anæmic; languid, with a nervous cough, and a discouraged but lady-like air. Find a spot of extreme dorsal tenderness, with pain between the shoulder-blades and in substernal region. Ordered a tonic course of treatment.

Saw this patient three months after first interview. Had not followed treatment regularly. Was much the same, with recent increase of pain in back of head, neck and dorsal spine. There was a creaking of the muscles of the neck, stiffness of the jaws, and slight swelling of the joints of the fingers. Patient left the State, and has not since been heard from.

CASE V.—Miss E., 38, school-teacher for many years. Father's father intemperate. Father excitable and inefficient. Menses always excessive, and is habitually costive. Gave up school-teaching on account of extreme nervous exhaustion, with depression

and pain in the back of head and neck, giving rise to involuntary jerking movements as an instinctive method of relief. Has also a mania for precise adjustment of certain things. Exhausts herself re-arranging clothing in closets and dishes on shelves, from a weak fear that they will fall on the floor if left alone. Sleeps irregularly. Appetite fair. Is thin and rather anæmic.

Find in this case, also, tenderness in the cervical and dorsal regions of the spine, with præcordial distress, increased by fatigue. Patient restrains her nervous movements before strangers, and is less inclined to them in public and when under the pleasant stimulus of new surroundings. Says she screams out at times, and is inclined to talk to herself. Ordered pills of aloes and sulphate of iron, to be taken as required. Also elixir ferri phos., calisaya et strychn., to be alternated with a mixture of the bromides of potassium and ammonium, the sesquicarbonate of ammonia and tincture of cinchona, every fortnight, and chloral grs. xv. at bedtime. Also instructions as to mode of life, in relation to hours for sleep, rest, exercise, occupation, amusement, and for a largely increased diet.

The eyes were examined by Dr. Jeffries, who found nothing in the retina of special significance, but a slight divergence and consequent disuse of the right one.

This patient improved considerably before leaving the city. Six months after, had decidedly improved, but lost strength under the "lifting cure" system during the summer months. Walked or rode a mile and a half and back to practise it, and lifted 100 lbs. Had muscular pain and increased debility in consequence. Has returned lately to remain under my care. No new symptom noticed, except a slight drawing of the face to the right on laughing. No other sign of paralysis of motion obtainable. This may have passed unobserved at former interviews, as the patient seldom smiled. Sensation by æsthesiometer $\frac{1}{2}$ in. for right cheek and 1 in. for left. Ordered zinc phosphid. gr. $\frac{1}{10}$, ext. nucis vom. gr. $\frac{1}{2}$ ter in die, with blisters to tender spots in spine. Diet to be increased in amount of animal food, and stimulants added at lunch, dinner and bedtime.

CASE VI.—Mr. A., 40, master machinist and inventor. In summer of 1870 passed a tapeworm, after two half-ounce doses of turpentine, which produced considerable purging and strangury. Patient kindly referred to me, in the fall, by Dr. Jewett, of Fitchburg.

Says he has overworked his brain by in-

ventions. Did not recover strength after passage of tapeworm. Is naturally robust and stout, but has lost flesh of late. Is in a state of debility, with disinclination for work of any kind. Loses his temper easily and frets about his business. Complains of pressure in head, with occasional headache, loss of sleep, bad appetite, and constipation. Says his sexual power is gone.

No facial paralysis observed, but enunciation is indistinct and careless, partly owing to narrow upper jaw and projecting teeth. Complains of slight numbness in little finger of right hand. No difference in sensation by æsthesiometer. Can stand more readily with eyes closed on left than on right foot.

This patient recovered in two months, under tonic treatment, improved diet, and small doses of the bromides. Iron and aloes relieved the constipation. Travel was recommended, after apparent recovery. The loss of sexual desire may have been due to former use of bromides, and continued while they were taken. This effect was explained to the patient.

CASE VII.—Mr. B., 52, married, engraver. Large frame and active mind. Imprisoned for Chartism in 1848. Threatened with brain fever many years ago. Became depressed three years ago, and two summers ago had several spells of transient unconsciousness. No spasms, but marked pallor. Complained of numbness in right hand and weakness in legs, with loss of memory. Went to London, and had much treatment, but no one seemed to understand his case. Referred to me by Dr. Sullivan, of Malden.

On examination, find no paralysis of lids, face, lips or tongue. Power in hands alike normal. Can write legibly, but with ill-defined letters. No trembling. Can walk several miles, but with considerable fatigue. Stands most unsteadily on right foot. Cannot stand long with feet approximated and eyes closed. Is a little unsteady on his feet when rising from his chair. No incoordination of speech or motion noticed.

Has a numbness more or less in all four extremities, most marked in ulnar half of right hand, but not definitely confined to distribution of the ulnar nerve. Thinks he could engrave, as numbness only affects those fingers on which hand rests, in writing or engraving. By æsthesiometer, sensation in right hand seems slightly impaired.

Is much concerned about his health and inability to work. Sleeps poorly, eats little and is very costive. Tongue—thin, pasty fur. Pulse 76, good strength. Ordered pil. colocynth. et hyosc. grs. v. at night, and chlo-

ral hydrat grs. xx. at bedtime. The above, recommended by Dr. Hammond in his recent book on Diseases of the Nervous System, was ordered instead of an elixir with the same ingredients. I have since learned that its preparation requires special manipulation. I have not seen this patient since the first two visits.

CASE VIII.—Mr. C., aged 40, married, teacher. Nervous temperament. In college, eight years ago, eyes gave out, and has since learned his lessons by having them read to him. Has taught in the Sandwich Islands, and in California. In February, after an unusually protracted day's work, his ideas became suddenly confused, and the power of application vanished. Tried to resume work after a day or two, but symptoms soon returned in an aggravated form, with heat of head, dizziness, and confusion of ideas as before. There was no defect of speech, or loss of motion; no spasms or unconsciousness at any time, but sudden and continued prostration of nervous power following excessive brain work.

Since February, and until I saw him, in September, 1869, he had been unable to make the slightest mental exertion without distress. Cannot read or talk, or hear talking, he says. Had homoeopathic treatment, vegetable diet, and a long horseback expedition during three months, with no improvement. Since, has used a more varied diet, but is afraid of tea, coffee or stimulants, on account of the queer feelings they excite in his head. Heat of sun is intensely disagreeable. Complains of cold extremities and chills, but wears a hat of pith, with ventilating space, around his head, and keeps a wet handkerchief always on his head. Is very hypochondriacal, but assumes a cheerful tone, and can be induced to laugh. Wife says he has not talked so much for months. Came East for treatment, and was referred to me by Dr. Garratt.

Advised him to give up travelling, to leave his wife, and to put himself in the hands of some competent physician, who would enforce a proper treatment and regimen, for a year. Could suggest no better place than McLean Asylum, where he consented to go. Remained a week, and thought he had got much new light on his case. Withdrew to the country to put his new ideas in practice, coming in town now and then to use general electrization at the hands of Dr. Garratt. Had improved three months after, but have not heard from him since.

CASE IX.—Mr. D., 40, druggist, married.

Mother hysterical, and aunt insane. Is small, thin, anæmic and feeble. Was formerly intemperate. Recently contracted a gonorrhœa, of which he is extremely ashamed. Complained when I first saw him, in the summer of 1869, of restlessness, loss of sleep, ringing in the ears, pressure at the vertex, and inability to work. These symptoms persisted, after the urethral inflammation had subsided, under use of oil of yellow sandal wood.

The record for June 22d is as follows: Sleeps moderately well under chloral grs. xxv. Rather costive; appetite fickle; feet cold; head hot; pulse 96. Is easily alarmed, and thinks he shall not recover. Has paroxysms of nervous excitement of an hysterical type. Ringing in the ears is a constant symptom.

July 7th.—No improvement. Mind very active. Reads Bible, and argues hotly on religious subjects. Very hypochondriacal. Has spells of confusion of ideas, and of palpitation of the heart. Is much alarmed at the latter phenomenon, and summons his friends to bid them farewell, but always disappoints them. Sleeps but three or four hours, in spite of as large doses of chloral as it seems safe to give. Stimulants are avoided on account of former habits. Other hypnotics have little effect. Appetite improves under various tonics.

Dec. 15th.—Improved slowly through the fall months. Eats well, and has gained flesh. Sleeps late in the morning. Still complains of constant tinnitus aurium. Has tried business, but has no energy or ambition. Is listless and lazy. Has formed the bad habit of invalidism. Keeps the house and reads too much. Now would be the time to travel, if he could afford it. Ordered a more active life, and daily regulated exercise.

Jan. 30th, 1871.—Fails entirely to carry out instructions. Consents to go to Taunton Hospital for the insane to have his mode of life regulated for him, and to give him a new motive for exertion. Returns November 20th, apparently recovered.

CASE X.—Mr. E., 39, book-keeper, single. Father's mother insane. Father had a rheumatic tendency. Mother's sister died of consumption. Mother a nervous invalid for twenty-five years, with occasional spasmodic attacks. Self a delicate boy, with an active brain, given to intellectual labor and neglecting his physical condition. Overworked himself, mentally, in business and in outside literary efforts, losing sleep, and neglecting the laws of healthy living, till four years ago.

After excessive mental labor prolonged into the night, four years ago, felt his powers desert him, and could with difficulty hold up his head. Had for a long time been excessively costive, with a feeling as of some foreign growth in left iliac region, to which he had referred all his previous symptoms. Had smoked to excess and drank strong coffee.

At this time, by diminishing his outside duties, managed to go on with his business, and has not left it, with the exception of a vacation of five weeks last summer. Has not slept for four years without the use of stimulants or chloral in small doses at bedtime. Gets, in this way, six or seven hours broken sleep. Wakes with a jump, just after falling asleep. Indulges in a more liberal diet than formerly, and takes considerable daily exercise in walking and lifting. Office work is easy at present.

Is better than he was two years ago, but worse than he was one year ago. Chief trouble, beyond loss of sleep, is a semi-involuntary movement of limbs and face, which increases under restraint, and ends, if the attempt at control is too long sustained, in a violent flushing of the face and a feeling of desperation. Avoids public assemblies on this account. The confinement of a barber's chair, or the dining table, is sometimes insupportable.

Is not particularly hypochondriacal in the offensive sense. Conceals his condition as far as possible, and takes an intelligent view of it. Had thorough general electrization for six months, and was improved by it. Uses it now occasionally. Has tried long rides, but thinks they aggravate his troubles. Is most nervous in the evening. Has taken belladonna, under the direction of Dr. Stone, of Walpole, who kindly referred the case to me as a matter of convenience to the patient.

This list of cases might be indefinitely prolonged, and every physician is familiar with the class of which these are examples. The symptoms differ in each, and may be as various as the nervous functions themselves. They may be chiefly mental, or chiefly nervous. Some one symptom may so predominate as to give its name to the case. The one fact in connection with cases presenting features of depression, hysteria, or hypochondria, which should be most insisted on is that mental symptoms are as significant of nervous exhaustion as physical. The feelings and ideas depend as directly on the state of the nervous centres as any other of the nervous functions. Depression, irritability, suspicion, wilfulness, and all

forms of morbid and disordered emotions, running into fixed or extravagant ideas, are symptoms of the same kind as numbness, pain, paralysis and spasm. They result from disordered function in different parts of the same nervous apparatus, and may depend on the same condition of nervous exhaustion. In dealing with nervous cases, it is important to remember that every symptom, mental or nervous, means *something*, and unless we patiently analyze both we fall short of the requirements of the case.

The indications for treatment in cases of neurasthenia are fundamentally the same, whatever the variety of manifestation, with the addition of such special methods as the peculiarities of each case seem to require. Rest, and an improved nutrition of the centre affected should be the aim, when mental disturbance exists. Moral forces come most strongly into play. To get and keep the patient's confidence by exhibiting a critical knowledge of his case and a true sympathy for his sufferings, intensely real to him, although misunderstood and overestimated in importance; and to educate him out of his mistaken notions, requires more time and skill and patience than most physicians can afford to devote to an exceptional case. The temptation is strong to throw all such exaggerated ills into the waste basket of disordered imagination, affronting the patient, and leaving him a prey to every form of quackery.

One great difficulty in these mixed cases of chronic neurasthenia is to keep the patient long enough under control to ensure a good result. The causes of deterioration have been a long time at work, and secondary states of anæmia and spanæmia exist with various bad cerebral habits, all of which must be overcome and outgrown. This fact is exemplified in the treatment of insanity, which is often a simple neurasthenia affecting the convolutions, and those patients are fortunate, sometimes, whose condition compels an early resort to hospital treatment. Here, time and rest allow the brain to lie fallow, and to accumulate, by an insensible chemistry, a new store of forces. Meanwhile, new blood is made, and the patient is educated to new hygienic ideas.

VARICELLA IN SAN FRANCISCO.—Chickenpox has been prevailing lately in San Francisco in an aggravated form, some cases so near to smallpox in character as to have been reported as such to the Board of Health.—*Chicago Med. Examiner.*

GRAEFEE'S OPERATION AND STATISTICS VINDICATED.—II.

By HASKET DERBY, M.D., Boston.

THE main question at issue, between my friend Dr. Loring and myself, is as to the reliability of the statement made by Graefe, that the results of the peripheric linear extraction had proved decidedly more favorable than those he had obtained by the flap method.

Dr. Loring writes:—

"It is still a question whether the old flap, and not the peripheric linear, does not give the best results."

And in attempting to prove this from Graefe's own statistics, he appears, as he informs us, in the rôle of a defender of our illustrious master.

I am sensible that the discussion of this subject is mainly attractive to those specially interested in ophthalmic surgery. And as the majority of the readers of this JOURNAL can hardly belong to this class, I propose to make my present remarks, the last I intend offering at this time, as brief as possible. A short resumé of what has already been brought forward will not be out of place. For the sake of brevity, I omit fresh reference to authorities already quoted.

The statistics of flap extraction, referred to by Graefe as furnishing a basis for comparison with the results of the new operation, were 80 per cent. of entire success, 13 of partial and 7 of failure. Those of the new method were 90 per cent. of entire success, and 10 of partial success and failure.

Dr. Loring now has argued that Graefe's statement with reference to the result of the new operation was fallacious, he having lowered his standard of perfect success from $\frac{1}{2}$ after the flap operation to $\frac{1}{4}$ after the peripheric linear; that, therefore, the results of the former in reality transcend those of the latter.

This opens up two questions: 1st, did Graefe gain vision of $\frac{1}{2}$ in 80 per cent. of his 1600 flaps? 2d, did he take as low a standard as $\frac{1}{4}$ for 90 per cent. of his peripheric linear cases?

The evidence brought forward by Dr. Loring has convinced me of what I was previously disposed to deny, namely, that Graefe, in 1863, intended his estimate of $\frac{1}{2}$ to apply to 80 per cent. of his 1500 flap extractions, and that he supposed it would be in his power to express fractionally, according to the method of Snellen just published, the acuteness of vision he had been accustomed for years to record in the old manner, which was by stating the No. of Jaeger's

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test-type the patient was able to read. With instances of vision thus expressed by Graefe and others ophthalmic literature teems, and, though it cannot be compared with the improved method due to the genius of Snellen, it must still be remembered that, before his day, there was no better way than this. It was natural to attempt the utilization of results recorded in the old manner, and with the intention of rendering this possible, Snellen appended to the French edition of his tests, published in 1862, a table showing the relation of Jaeger's type to his own. According to this, we have Jaeger No. 11 equal to Snellen IV. A person reading Jaeger No. 11 in 1 foot would have his vision estimated at $\frac{1}{4}$. It has been justly observed that this is practically wrong, though theoretically right,* for we frequently find patients with amblyopia, or who have been operated on for cataract, who can easily read $4\frac{1}{2}$ of Snellen, but cannot make out CC at 20 feet. In other words, vision $\frac{1}{4}$ in 1 foot is not always, and in fact rarely, vision $\frac{1}{4}$ in 20 feet, using Snellen's types, after cataract operations. So Snellen appears to have found, for his comparative table was withdrawn from later editions of his work. So Graefe evidently became persuaded, for *we have no evidence of his having carried out his project of reduction*.

He says, in 1863, that he has made a collection of 1500 flap cases, that he reserves the work for separate publication, and that, according to his estimates, 80 per cent. of such operations result in ultimate success, i. e. vision $\frac{1}{2}$ under, $\frac{1}{4}$ over the age of 75. In 1864, he says, in the passage cited by Dr. Loring in his last article, that he is at work making out the statistics of 1600 cases. The task, therefore, had not, up to that time, been completed. He is, moreover, bringing (not "has brought") the results into four groups, the first embracing the complete successes where vision is $\frac{1}{2}$. The first of these remarks occurs in a clinical lecture, the second in a public discussion. On a third occasion, in 1865, he refers to the work in the columns of the Archiv, his official organ, and in such a manner as to induce a belief in its having been completed. He has discarded the four groups and brings his cases under three heads; he

* Dr. Dyer, of Philadelphia, a fellow-student at Berlin and Utrecht, in a private letter, draws attention to the fact that Graefe, in referring to his 1500 cases in 1863, endeavored to reduce his records of vision to Snellen's standard, but made a mistake when he attempted to generalize his statistics, and assumed that a patient who could read Jaeger No. 11 (= Snellen IV) necessarily had vision $\frac{1}{4}$, or must be able to read C in 25 feet.

no longer speaks of his partially successful cases as having vision greater than $\frac{3}{10}$, but as able to read fine print; he makes no reference to the method of Snellen, and leaves us to infer that the reduction of his previous results to it had not turned out practicable, and had been given up.

It does not, therefore, seem proved that 80 per cent. of 1600 cases of flap extraction acquired vision $\frac{1}{2}$; in other words, were able to make out Snellen CC in 25 feet.

It only remains to inquire whether Graefe took vision of $\frac{1}{2}$ as a standard of success in 90 per cent. of his peripheric linear cases. Our assumption that he did so is erroneous, as will be presently seen. It will be, moreover, seen that Dr. Loring was in error in saying that there is no reason for believing that Graefe did not here too make an allowance for old age, and class as perfect results those whose real vision was expressed by a somewhat lower fraction. To prove this and give Graefe's last published estimate of the comparative results of flap and peripheric linear extraction, I will simply make three quotations from what he wrote in the *Klinische Monatsblätter* for 1868.

"If, without going into details, we look back on the results of flap extraction, we find that the statistics capable of utilization—that is those which, while taking into account the amount of vision, are based on a long array of cases and a tolerable equilibrium of external circumstances—average 80 per cent. of complete, 15 to 12 of partial success, and 5 to 8 of failure." P. 14.

Speaking of the new method:—

"Statistics, taken a short time since from my journal, give, for a total of 600 cases, 90.4 per cent. complete, 6.8 half success, and 2.8 failure." P. 17.

"—the full results after linear extraction, in all of which vision exceeds $\frac{1}{2}$, or, if the patients are very old, $\frac{1}{3}$." P. 267.

As he had said nothing since 1864 with reference to what success after flap operation meant, it is probable the standard, governing the remarks just quoted, was the same.

To these words nothing need be added. Graefe is his own best defender. He thought and stated, from first to last, that he got better results from the new method than the old. What the results from each were none knew better than himself. Who can believe that he did not speak and write advisedly?

A CASE OF POISONING BY THE EXTERNAL APPLICATION OF ACONITE.

By STEPHEN S. KEENE, M.D., Providence, R. I.

On the 3d of October, a male patient, aged 45, of good constitution and in sound health, had pain in right side of the face, and obtained from an apothecary the following prescription:—

R. Tinct. rad. aconiti,
Tinct. opii, aa ζ ss. M.

He applied this to the face by rubbing with the fingers of the right hand.

One half hour afterwards he was seized with dizziness, nausea, dimness of sight, cephalalgia, pain in back with sensation of coldness running along the spine, partial loss of motion of lower extremities, with cramps and pricking sensation and coldness in legs and feet. Half an hour later he felt pricking in hands, with loss of motion. No convulsions.

One hour after the application of the aconite, I found him to be in the following condition:—Countenance pale; expression of anxiety and distress; cephalalgia; dizziness; mind confused; hearing not affected; dimness of vision, sight confused, pupils dilated, no motes; speech and deglutition intact; movements uncertain; trembling of extremities; no convulsions; pain along spine, extending to lower extremities; partial paralysis of motion and sensation of lower extremities, with cramps, numbness, coldness and pricking sensation in legs and feet; partial paralysis and pricking sensation in upper extremities, less marked than in lower extremities; some nausea; pulse feeble; skin cold.

On examination, no abrasions were found on face, but the index finger of right hand had a slight wound. He was treated with ammonia and chloroform. Four hours later, all the symptoms had diminished in intensity. During the night, however, delirium came on, but the next morning the symptoms had nearly subsided, and they had entirely disappeared at the end of forty-eight hours.

Among the curious social facts developed by the census statistics is the appearance on the rolls of Pennsylvania of one family with seven pairs of twins; one family with six pairs; and another family with four pairs. The mother of the last group has six other children, and was only 38 years old.—*Med. and Surg. Reporter*.

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY J. H. MC'COLLOM, M.D., BOSTON.

The Society met Dec. 30th, Dr. Geo. H. Lyman, the President, in the Chair.

Embolus of Cerebral Artery.—Dr. Lyman exhibited an embolus of the middle cerebral artery. The patient had had several attacks of rheumatism, which had caused valvular lesions of the heart. About twenty-four hours previous to his death, he suddenly became unconscious, although at intervals he rallied slightly and was delirious; the delirium being of the low, muttering order. There was dilatation of the pupils and paralysis of the extremities. A short time before his death, he became partially conscious, but soon relapsed into a comatose condition, from which he did not recover. At the autopsy, an embolus was found in the middle cerebral artery.

Dr. Chenery read a paper on hæmoptysis, as the result of excessive coitus.

Cancer of the Face.—Dr. Brooks related a case of advanced cancer of the face. Cundurango had been tried, but without any beneficial result. The existence of paralysis was spoken of as an interesting complication in this case.

Death of Dr. Stephen Ball.—Dr. R. H. Fitz gave an account of the autopsy which he had lately performed on the body of the late Dr. Ball, a member of the Society, who died of cancerous disease of the stomach. The body was somewhat emaciated. The lungs were free from active disease, although two cicatrices were found at the apex of one lung, and at the base an *ante-mortem* clot. In the left lung there was a nodule, which, upon examination, proved to be a clot, containing in its centre a small grayish mass. The liver, spleen and kidneys were atrophied. The middle lobe of the prostate gland was somewhat hypertrophied. Nearly two thirds of the stomach was involved in the cancerous disease, which was seated in the mucous and muscular coats. Near the pylorus the muscular coat was thickened, discolored, and in some places had ulcerated. Towards the cardiac orifice the structure of the mucous and muscular coats was less dense than is normal, and elevated patches resembling cancer could be distinguished. The pyloric orifice was constricted by a thickening of the mucous and muscular coats. The bladder and rectum were also the seat of this disease,

which appeared in the form of thick plates disseminated on the surface of these organs.

In this connection, Dr. Fitz remarked that it was the opinion of Virchow that the appearance of secondary cancer in the rectum and bladder was due to a physical falling of the germs of the disease.

Dr. Jackson gave a history of the illness of Dr. Ball. Last spring, it was noticed that Dr. B. began to fail, although he continued to practise until a short time previous to his death. Some time in May, a tumor appeared in the region of the stomach, which gradually increased in size until it extended across the epigastrium, and was six inches in length by two in breadth. The ingestion of food was followed by regurgitation. There was no actual vomiting at any time, and very little pain near the seat of the disease. Constipation, which is of common occurrence in the disease, was not at any time a marked symptom. Dr. Jackson also remarked that the disease was very extensive, only the left extremity of the organ being intact, and that the disease usually extended from left to right. Cancer of the stomach may not give rise to grave symptoms unless the orifices of the organ are implicated, and then there will be dyspeptic symptoms. Dr. J. said that he did not believe the theory of Virchow, that secondary cancer was due to the dropping of the disease germs. But as cancer was a constitutional disease, it seemed reasonable to him that it might be confined to one organ at first, and then extend to the others through the circulation.

Opium Poisoning.—Dr. Hunt read a paper on a case of poisoning by opium. The paper appeared in the *JOURNAL* of Jan. 11th.

Dr. Johnson asked if atropia was of any use as an antidote in cases of poisoning by opium. He said that he was of the opinion that atropia had no antagonizing action to the poisoning effect of opium.

Dr. Lyman answered the question by relating a case occurring in his own practice, in which the life of a patient was saved by the hypodermic injection of atropia, after narcotism had been caused by the injection of morphine.

Dr. Spring stated that he had used belladonna with much benefit in cases of poisoning by opium. He also called attention to the experiments of Dr. Mitchell, of Philadelphia, in reference to this subject.

Dr. Fitz spoke of a series of experiments performed in France, in which it was found that although the use of atropia counteracted some of the poisonous symptoms of opium, still in those cases where doses were

given large enough to kill the animal, the fatal effect was not influenced by the atropia.

Dr. Hazelton related a case of opium poisoning where coffee and constant motion were the agents used, with marked relief of the symptoms.

Dr. Lyman related a similar case, where the cold douche was combined with active exercise, which contributed in a marked degree to the recovery of the patient.

Pleuritis and Rheumatism.—Dr. Fisher related a case of acute rheumatism in an aged person, in which pleuritis supervened.

Dr. Jackson remarked that it was not very common for rheumatism to be complicated with pleuritis.

The Society adjourned.

Selected Papers.

OBSERVATIONS ON CRANIA.

FROM the interesting report of Professor Jeffries Wyman, Curator of the Peabody Museum of American Archaeology and Ethnology, we take his observations on Crania:

The *Peruvian* crania present the two modes of artificial distortion commonly seen, those from chulpas or burial towers and other places in the neighborhood of Lake Titicaca being lengthened, while those from nearly all the other localities are broadened and shortened by the flattening of the occiput. They are, on the whole, massive and heavy. Many of the measurements usually recorded in describing ordinary crania have been omitted, since they would in those under consideration depend upon the degree to which the distortion has been carried, and would, therefore, give artificial and not natural dimensions. * * * * *

Although the crania from the several localities, as seen in Tables I—VII, show some differences as regards capacity, *e. g.*, those from Casma, Cajamaquilla, and Truxillo, as compared with those from Grand Chimu, Amacavilca and Pachicamac, yet in most other respects they are alike. The average capacity of the fifty six crania measured agrees very closely with that indicated by Morton and Meigs, *viz.*, 1230 c.c., or 75 cub. inches, which is considerably less than that of the barbarous tribes of America, and almost exactly that of the Australians and Hottentots as given by Morton and Meigs, and smaller than that derived from a larger number of measurements by Davis. Thus

we have, in this particular, a race which has established a complex civil and religious polity, and made great progress in the useful and fine arts, as its pottery, textile fabrics, wrought metals, highways and aqueducts, colossal architectural structures and court of almost imperial splendor prove, on the same level as regards the quantity of brain, with a race whose social and religious conditions are among the most degraded exhibited by the human race.

All this goes to show, and cannot be too much insisted upon, that the relative capacity of the skull is to be considered merely as an anatomical and not as a physiological characteristic, and unless the quality of the brain can be represented at the same time as the quantity, brain measurement cannot be assumed as an indication of the intellectual position of races any more than of individuals. From such results the question is very naturally forced upon us whether comparisons, based upon cranial measurements of capacity as generally made, are entitled to the value usually assigned them. Confined within narrower limits they may perhaps be of more importance. But even in this case the results are often contradictory. If the brains of Cuvier and Schiller were of the maximum size, so were those of three unknown individuals from the common cemeteries of Paris—while that of Dante was but slightly above the mean, and Byron's was probably even below it.

The collection of mound crania from Kentucky, made by Mr. S. S. Lyon, under the joint patronage of the Smithsonian Institution and this Museum, is by far one of the most valuable hitherto brought together. A comparison of these crania with those of the other and later Indians, shows that they have certain marked peculiarities, though these are doubtless better appreciated when the two kinds are placed side by side, than from any tables of measurement or verbal descriptions.

The twenty-four crania measured show a mean capacity of 1313 cub. cent., which is greater than that of the Peruvians, but less than that of the N. American Indians generally (*viz.*, 1376 c.c., or 84 cub. inches). They differ also from those of the ordinary Indians in being lighter, less massive, in having the rough surface for muscular attachments less strongly marked. The top of the head shows a moderately angular or roof-shaped arrangement of the parietal bones and the sides are vertical. In proportions they present a very considerable variation amongst themselves. Assuming

the length of the skull to be 1,000, the breadth ranges from 0.712 to 0.950 of the length. The average proportion is 0.857, which places them in the short headed group. This result is influenced, but not to any great extent, by the fact that the crania have been somewhat distorted by a flattening of the occiput. In the majority, this flattening is very slight, and is indicated by a nearly plane surface just above the protuberance, and which would not materially diminish the length of the skull. The position of the foramen magnum is quite far back. We have shown elsewhere that in the North American Indians, generally, it is farther back than in the Negro and other races with which they had been compared. In the mound crania the distance of the anterior edge of the foramen magnum from the occiput is only 0.372 the long diameter of the skull. This position can be only partially due to distortion, since in the three skulls in which the foramen was farthest back the occiput was not in the least flattened.

Dividing the crania into two groups, according to the features which distinguish the sexes, the numbers of the two are about equal, and comparison of them shows a difference of 125 c. c. in favor of the males.

The separate bone at the apex of the occiput, and known as the "epactal," or "bone of the Incas," exists in a somewhat smaller proportion than in the series of Peruvian crania presented by Mr. Squier. It is certainly found more frequently in the mound than in other crania of N. America, and is a point of resemblance to the Peruvian not to be overlooked, though it may be purely accidental.

The crania from Florida were nearly all obtained from a single burial place near Shell Mound, a few miles from Cedar Keys. Shell Mound is an ancient Indian shell-heap of gigantic proportions, forming an amphitheatre, in some places rising to the height of twenty feet, and enclosing an acre of land now under cultivation. If one may judge from the immense quantity of shells brought together, it must have been inhabited for a long period of time, as the limited space around it uncovered with water could afford habitations for only a comparatively small population. The burial place was on a neighboring island, separated from it by a narrow channel. In some parts the general surface did not indicate the presence of a cemetery, but a few graves had, however, been opened before our excavations were made. Nearly all the crania here described were from a small

mound of sand, in which the dead were deposited without any definite order, and the only objects buried with them being oyster shells, fragments of pottery and drinking cups made of the shell of *Pyrula*. In some cases two or three oyster shells were the only objects, and in no instance was anything made by the white man detected, such as glass beads, &c. The burials were all of the rudest kind. No indications of approximate age of the mound were found, nor could information with regard to its history be obtained. The trees growing upon the mound were none of them more than a half a century old. The bones were all greatly decayed by the destruction of the organic matter, and it was only with the greatest care that they could be removed without injury or even complete destruction. When dried they acquired greater firmness, but could only be preserved and handled after being immersed in gelatine.

The capacity of the skulls is 1375 c. c., nearly 84 cub. inches, and is greater than that of the mound crania. The foramen magnum is quite far back, its index being .374, very nearly the same as that of the crania just referred to, but there are no signs whatever of distortion. They are remarkable for massiveness and thickness. The average thickness through the parietal bones in eight of them amounting to 10.5 m. m., or 0.42 inch, or almost double the usual thickness, and in this respect they contrast very strikingly with skulls from the mounds, as they also do in the general roughness of the surfaces for muscular attachments on the hinder part of the head.

The skulls are quite heavy, but in consequence of the destruction of the bones of the face in most of them, the whole weight could be had in a single instance only. This happens to be the heaviest of the series, weighing 995 grams, and, notwithstanding the loss of its organic matter, is heavier than any of the three hundred skulls of various races in our collection. The next heaviest are those of a Negro, weighing 975 grams, of a Hawaiian Islander, weighing 845 grams (the average of 21 crania being 640 grams), and of a Tsuktshi, weighing 860 grms.

CHEMICAL NOMENCLATURE AND THE PHARMACOPOEIA.

By HUBERT PRIMM, Ph.D., Apothecary, St. Louis.

THE close alliance existing between the Pharmacopoeia of the United States and that of Great Britain, especially in that por-

tion of these works which has a direct reference to applied chemistry, render any endeavor to simplify and harmonize their nomenclature to the advanced theoretical knowledge of this science a matter of interest to pharmacists as well as to the medical profession at large; consequently, the paper of Prof. Attfield on "The Chemical Nomenclature of the Pharmacopœia, with Suggestions for its Revision," read at the April meeting of the Pharmaceutical Society of Great Britain, is well worthy of notice at our hands.

Prof. Attfield holds that the chemical nomenclature of the current pharmacopœias is mainly scientific, founded on theory, and therefore liable to change; that, of necessity, in its relation to medicine and pharmacy there is much mutability; which is a great fault, because the life and health of a people are largely dependent on the perfect understanding which should subsist between the physician who prescribes and the pharmacist who prepares.

Within the last few years, the views hitherto prevailing of the constitution of matter have undergone radical alteration, as being no longer consistent with ascertained truths, and the nomenclature embodying these views has, of course, shared the fate of the theories. Under these circumstances, the principles that are to guide us in adopting for medicine, pharmacy and the pharmacopœia such names as, on the one hand, are perfectly explicit, readily understood, unambiguous, and, on the other, consistent or at least harmonious with prevailing chemical theories as expressed in the educational literature of the sciences, are of the utmost importance.

The nomenclature of the chemical portions of the pharmacopœias of Great Britain and of the United States is that mainly suggested by Lavoisier, the fundamental principle of which is "that the name of a salt should express its composition." The great majority of chemical substances employed in pharmacy are such mineral salts as were known to Lavoisier, and their names were mostly given on the assumption that they contained, on the one hand, an undecomposable body, generally a metal common to a whole class of salts (the compounds of *copper*, for example), and on the other, a body or a group of elements, also common to a number of salts (*sulphates*, for example). Soda, potash, lime, baryta, magnesia, and alumina, were then considered to be elements; hence such names as carbonate of soda, nitrate of potash, and sulphate of baryta, are perfectly consistent

with those of carbonate of iron, nitrate of mercury and sulphate of copper. Gradually the vulgar names of green vitriol, blue vitriol, glauber salts, and gypsum, for example, gave way to the more scientific nomenclature invented for them, as the substances just mentioned were considered to contain, on the one hand, the "elements" iron, copper, soda, and lime, respectively, and, on the other, a group of elements common to each of the former compounds; the four different elements were indicated in the spoken and written nomenclature of the compounds by the four names "iron, copper, soda, and lime," while the one group and its presence in each of the four compounds was indicated in the nomenclature of the same by the word "sulphate"—sulphate of iron, sulphate of copper, sulphate of soda, and sulphate of lime.

There arose no occasion for change or interference in the system until 1807, when Davy made his memorable and brilliant researches on the alkalies and alkaline earths, and discovered that potash, soda, baryta, strontia, and lime, were not elements, as had been previously supposed, but that the true basylous radicals of the so-called compounds of potash, soda, baryta, strontia, and lime, were metals, to which were given the names of potassium, sodium, barium, strontium, and calcium. Thenceforward the old names potash, soda, baryta, strontia, and lime, were used to designate the oxides of the new metals. This discovery of Davy was like the apple of discord among the chemists of the day, for the names of the salts of Davy's metals were no longer consistent with the names of the salts of all other metals; for while the sulphate of iron distinctly expressed the combination formed by the union of metallic iron with a common acidulous group of elements represented by the word "sulphate," the name "sulphate of soda" as distinctly expressed a compound formed by the union of oxide of sodium with a common acidulous radical still indicated by the word "sulphate," but not having the same composition as (having less oxygen than) the similar acidulous radical united with the iron; hence it was felt that either such words as "sulphate," "nitrate" and "carbonate" must each have two significations, and salts of the alkalies and alkaline earths be compounds of the oxides of metals, and all other salts (*i. e.* sulphate of iron, &c.) as compounds of metals—or such words (sulphate, nitrate, &c.) must have a common (though an altered) meaning, and all oxygen salts be considered as compounds of oxides of metals.

Prof. Attfield states that Davy—supported afterwards by Dulong, Clark, Graham, Liebig, and Daniell—suggested that

"All metallic salts were composed of metal alone on the basylous side, and a distinct radical on the acidulous side. * * * Many objectors to the theory arose, and hence salts came to be regarded as compounds of oxides of metals with certain acidulous radicals now known as anhydrides. * * * In short, no theory of the constitution of salts was offered, or has yet been offered, which satisfactorily explains and harmonizes all known facts respecting salts, * * * so when, a very few years ago, chemists were led by irresistible arguments and stubborn facts to double many of the old atomic weights, an opportunity of abandoning existing constitutional theories then presented itself and was by common consent accepted. * * * The dualistic idea of salts * * * and the not less binary notion renounced, or, at all events, restricted to the idea of *oneness*."

After discussing the relationship existing between the modern chemical notation and the pharmacopeia, and that notation and nomenclature should harmonize, as they are but different methods of expressing the thoughts and wants of everybody respecting chemical substances, the Professor holds this language concerning the properties of names:—

"1. The name should, as far as possible and practicable, indicate composition.

"2. The name should be associated with only one substance—though synonyms are useful both from a theoretical and a practical point of view.

"3. A name, even if fallen out of use, should not be transferred to a substance having properties different from the original substance.

"4. The name of an official chemical substance, that is to say, a name officially recognized in national pharmacopeias, should possess the minimum of instability. * * * Verbal changes of almost any kind are unpopular. * * * Changes in the name of pharmacopœial chemicals are objectionable in the interest of medical practitioners, their patients, and pharmacists.

"5. A pharmacopœial name should admit of being either easily spoken or written, both in the full and in the contracted form, in modern languages and in the Latin.

"6." When close resemblance between two salts is indicated in all but one of the syllables of two names, that syllable should be at the commencement of the name, and not at the end, where it would be liable to

be omitted by a prescriber. Indeed, such variations are often indicated with the utmost usefulness by a separate word altogether, confusion and even mischief being thereby avoided. Thus for calomel and corrosive sublimate the words *subchloride of mercury* and *perchloride of mercury* are greatly to be preferred to *mercurous chloride* and *mercuric chloride*; for a physician in writing a prescription would contract the former to *hydr. subchlor.*, and the latter to *hydr. perchlor.*, which are still distinct; while the others would be both liable to be contracted to *hydr. chlor.*, and a patient perhaps be killed by corrosive sublimate, instead of cured by calomel. So *green iodide of mercury* and *red iodide of mercury* are better than *mercurous iodide* and *mercuric iodide* * * * any greater precision that may be desired being given by chemical formulæ.

"7. A name should not be changed for mere purpose of euphony, real or supposed; thus, chlorhydric for hydrochloric.

"8. Names of pharmacopœial chemicals should be consistent with each other.

"9. The chemical names employed in pharmacy should be consistent with those used in other branches of applied chemistry, and with the language of scientific chemistry and general chemical literature. I say consistent; certainly not identical. For I believe the time has come, when, by making a few slight alterations in the terminations of a few of our chemical names, we shall have a system of pharmaceutical nomenclature, which, while perfectly harmonious with, is quite independent of, scientific chemical nomenclature, and which, therefore, contains greater elements of permanence than any yet adopted. These alterations, be it noted, are in the terminations of the names only; hence the contracted names almost universally used by physicians and pharmacutists would in no way be interfered with."

The chief alterations proposed by Prof. Attfield consist in this, that the compounds of the alkaline metals and alkaline-earth metals, instead of being named as hitherto on two distinct systems, should follow but one:—"that instead of salts of potassium and potash, we should have salts of potassium only; and so with the preparations of ammonium, lithium, calcium, magnesium, and aluminum;" and that when similarity between two salts is indicated by identity in all but one of the syllables of their names, that syllable should be at the beginning and not at the end of the word, where there would be a likelihood to omit by the phy-

sician. In America, especially, where a scientific, or even a half-way scientific education on the part of the pharmacist is in no way obligatory to the practice of his profession, it is particularly desirable that Prof. Atfield's suggestion in its main features should be adopted into the pharmacopœia, as from the non-scientific education of the bulk of pharmacists it is decidedly more important that names should denote things rather than ideas as to the nature or constitution of the same—independently of the simplicity of the plan by which uniformity is arrived at in the designation of chemicals in pharmacy.—*St. Louis Med. and Surg. Journal.*

Medical and Surgical Journal.

BOSTON: THURSDAY, FEBRUARY 1, 1872.

THIRD ANNUAL REPORT OF THE STATE BOARD OF HEALTH.

THE report of the Board of Health for the year just closed was presented to the State Senate a few days ago by the Secretary, Dr. George Derby. From the statistics given and from a knowledge of the subjects investigated and reported on, we are confident that the Board, which has so high a stand in the estimation of the physicians of the State, will gain equal respect from our legislators.

After the general report, a detailed account is given of the various hearings and decisions of the Board under the law concerning *slaughter houses and noxious and offensive trades*. It is stated that the opposition of the prominent butchers of Brighton to the building of an abattoir has ceased, that land has been bought and plans are now being made for the erection of buildings in which all portions of the slaughtered animals can be converted into useful materials on the spot. The probable result will be that Brighton, instead of being a nuisance to itself and to all travellers through its borders, will be rid of all those things which now make it offensive. The power of inspection given the Board by the act of incorporation of the Boston Slaughtering and Melting Association, added to

the fact that the Board has a right to direct all engaged in slaughtering within six miles of the State House to transact their business at the Brighton abattoir, if it is found to be a nuisance elsewhere, will be a tower of defence for Boston and vicinity against the sale of unwholesome meats.

The article on *arsenic in green colors* is a paper by Dr. F. W. Draper, giving information of really vital importance concerning the danger of poison by green-painted toys, wall-paper, artificial leaves for bonnets, lamp shades and confectionary colors.

The article on *mill-dams and water obstructions* is written by the Secretary of the Board, Dr. Derby. He shows that such obstructions arouse consumption and malarial fevers, and that epidemics flourish near them. He says that the industrial and hygienic questions are inseparably joined, and that the legislature should so regard them when mill-dams are thought necessary.

Dr. Bowditch submits a careful analysis of the correspondence contained in the report of last year, and of other facts more recently obtained bearing on the use of *alcoholic liquors*. The idea of bringing intemperance under cosmic law, and of graphically representing that fact, is brought out in this paper for the first time in the history of the subject. The Board recommend the establishment of inebriate asylums.

The subject of the *adulteration of food* is treated of at some length, and the result of investigations on the subject is given, especially in regard to canned fruits, vinegar and coffee. Advice of a general character is given in reference to various articles of consumption, and this portion of the report will undoubtedly be extensively read among the laity and be of practical use.

Dr. Edward Jarvis has contributed a valuable paper with reference to the *classification of insane persons*. He urges the necessity of variations in the character of the architecture of asylums to meet the various classes of patients, and of erecting buildings in the future more in accordance with modern opinion in this regard. No restraint, except what is absolutely necessary, should be put upon the unfortunate inmates of these establishments. At present our asylums have too much of the general aspect

of common jails. The Board commend this report to the consideration of those who may be charged with the building of hospitals for the insane.

Dr. F. E. Oliver furnishes a paper on the *use and abuse of opium*. There has been an enormous increase in the importation of opium during the past quarter of a century, and it behooves us to discover, if we can, what use is made of it. The habit of opium-eating not unfrequently has had its origin in the prescriptions of physicians; various nostrums for children contain large amounts of this drug. Reform from the opium-eating habit is found to be even more difficult than from the intemperate use of alcohol.

Dr. A. H. Nichols gives a very complete statement of the effects on health of the use of *sewing machines* moved by foot power, based on personal investigation and returns from a large number of correspondents. It is evident that most women cannot make continuous use of the common pedal for any considerable time without suffering from general debility and various local disturbances. These evils may be prevented by the substitution of steam for foot power in large establishments, or by the use of electro-magnetic power, or by the use of improved pedals, which greatly reduce the required movement of the feet and legs of the operator.

The article on *vegetable parasites* and the diseases caused by their growth on man, written by Dr. James C. White, is a thoroughly scientific and elaborate statement of the whole subject, which the Board submits to the medical profession in confidence that they will find it of great value.

In reference to *smallpox*, the Board state that unremitting vigilance against the first inroads of the disease and prompt measures for the seclusion of patients, with a thorough vaccination of all children and of all non-vaccinated or imperfectly vaccinated adults, are the only safeguards for a community. If in all places the above rules had been always adhered to the greater part of the 3000 dead in Massachusetts from smallpox in twenty-eight years would have been saved. The Board call attention to the defects of the present law relative to smallpox.

After speaking briefly of the *health of the various towns* from which letters are given, the report says the Board have seen with great pleasure two propositions made the past year in the City Council of Boston—one relating to the appointment of inspectors of meats, fish and vegetables, with power to destroy all such articles as are offered for sale in a condition unfit for food; the other proposing that the powers of a Board of Health be transferred from the Board of Aldermen to a distinct and independent Board, holding office for a term of years and selected with reference to their fitness to meet the important questions which must constantly engage their attention.

Under the head of *model lodging and low tenement houses*, commendatory allusion is made to the work of the Boston Coöperative Building Company, which is described at considerable length.

The report also advocates the making and preservation of records of sickness as a most important means of preserving health. It is suggested that if some plan were begun here and gradually extended by State Boards of Health throughout the country, the grand idea of a national board of health, proposed many years ago by Jeremy Bentham, might be realized.

It is stated that in addition to the subjects on which special reports are submitted, others have received attention and their investigation will be continued. Among them are mentioned the cause and means of preventing consumption, and the food of the people of Massachusetts.

The expenses of the Board for 1871 were \$2843 05, of which \$529 25 was for postage and stationery.

NEW DISPENSARY FOR SKIN DISEASES.—All large foreign cities, and New York and Philadelphia in our own country, have dispensaries devoted solely to the treatment of skin diseases, and the experience of those cities has shown the value of such institutions. The need of one in Boston is apparent to every observant pedestrian. The motto of Boston should be "*monstro viam*;" failing this, let her at least accept "*credo experio*." As she has an Eye and Ear Infir-

mary, as well as eye and ear departments at her hospitals, so she needs a dispensary for skin diseases, in addition to the hospital departments for these maladies.

Our hospitals barely supply the needs of the North End and vicinity and of the rapidly extending South End. The Eastern and Southeastern quarters, with the South Cove and Dorchester Districts, are unprovided for. Many patients also dread to go to a "hospital." At the Boston Dispensary there is no department of skin diseases, and the physicians of the Dispensary acknowledge the need of some institution where these diseases may be properly and thoroughly treated. Dr. Damon, of the City Hospital, has already called attention to this need. The new Dispensary for Skin Diseases is at No. 241 Harrison Avenue, corner of Pine Street, and is under the professional charge of Dr. Edward Wigglesworth, Jr. It starts under the most favorable auspices, with the "best wishes" of our first dermatologists, and with an annual subscription of more than treble the amount expended annually by the Skin Dispensary of Philadelphia. Open Mondays, Wednesdays and Fridays, from 11.30, A.M., to 1, P.M.

FOREIGN CORRESPONDENCE.—We are permitted to publish portions of a private letter from a Boston gentleman in Vienna, containing items of interest to the profession:—

VIENNA, December 20, 1871.

DEAR DR.,—An exaggerated type of the genus quack has been recently attracting so much attention in Austria by the extraordinary nature and the enormous number of her pretended cures, that I am tempted to detail briefly her procedure, as lately described in the papers. She is a woman, Dal Cin by name, of Italian origin, who for a year or more has been moving from village to village, and town to town of Northern Italy, Hungary and Austria, claiming to effect by certain manipulations a perfect cure in all cases of dislocation of the hip, hip-joint, and such like diseases. The number of those treated by her with perfect success is recorded as many thousands. At last, two months ago, she ventured into Vienna and began to ply her trade; here she soon acquired such renown that a commission from the medical faculty was ap-

pointed to investigate her claims to be admitted to practise in the city—a privilege granted only to those who have proved themselves fully qualified. The four cases seen by the committee, in all of which the head of the femur could be unmistakably felt to be in the acetabulum, were diagnosed by the Frau Dal Cin as all dislocations, which she would proceed to reduce. To effect this, having first placed the feet so as to show the greatest possible deformity, she seized the limb, made several complicated but painless motions without especially fixing the pelvis, and then, by means of the shortened limb, drew down that side of the pelvis, laid the feet together and held them so, while she showed to the astonished public that the soles were side by side, and the limbs were of equal length. In order not to be detected while preparing the bandage, she bent the knee of the longer leg, and placed the foot across the back of the other. A bandage of tow and white of eggs was applied to the thigh with an external splint. The patient was then ordered to remain in bed and not remove the dressings for a month. The reduction being announced as perfect, the physicians proceeded to measure the limbs, with the result that in no one of the cases was the slightest change in length, position or mobility discovered. After these experiences and proved facts, the commission felt themselves justified in publishing the following statements:—

"1. The Frau Dal Cin has not the most superficial conception of a dislocation, or the means of its reduction (in one case she designated the trochanter as the head of the femur).

"2. The attempted operation consists in irregular, changeable, planless, passive motions, insufficient either to reduce a dislocation or stretch a contraction.

"3. The success of these painless motions was, in every case examined, *nil*.

"4. Inasmuch as Frau Dal Cin, after the so-called reduction, makes use of certain manoeuvres with the object of deceiving as to the comparative length of the limbs, it follows that Frau Dal Cin is fully cognizant of this deception, and that she is in the true sense of the word a female swindler."

As a result of this report, the fair Italian has been forbidden the city, and driven to practise her calling among a more credulous folk.

Bamberger is at length appointed successor to Oppolzer in the 1st medical clinic; he has accepted the call, and will enter upon his new duties at the opening of the summer semester. Nothing but rejoicings, in the medical circles of Vienna, greet the announcement that the unanimous and oft-repeated nomination of the Faculty has been

at last accepted by the new liberal Cabinet of the Empire. On the very last day of power, the former Minister of Education sent to the Emperor for signature the paper conferring the position upon his *protégé*, Prof. Körner, of Gratz, a man said to be of inferior ability. This last act of bureaucratic despotism was defeated, however, by the act of the Sovereign in returning the document unsigned, with the order that it should be transmitted to the newly appointed Minister for consideration.

Earlier in the semester, an attempt was made to appease the demands of the faculty and students, by the establishment of a new third clinic of general medicine, with Dr. Gustave Loebel, first physician of one of the smaller hospitals of Vienna, at its head; this, though recognized as an enlargement of the capacities of the University, commensurate with its requirements, yet could not be accepted as equivalent to the services of the distinguished Professor of Würzburg, nor at all satisfy their complaints. This obstinacy on the part of the minister is characteristic of the man, who is a self-willed, opinionated Jesuit; he is opposed to all the liberal educational views of the age, and has been in favor of entrusting all the schools and educational institutions in Austria to the Society of Jesus.

To his overthrow, and that of the whole ministry, the body of students (*studentenschaft*) contributed not a little by their action at the inauguration of the Rector on Oct. 10th. Jirizik's entrance to the hall was greeted with hisses from the 3000 students assembled; this he bore with the best grace possible, as well as the marked avoidance of him by every member of the Faculty.

On the announcement of the elevation to the ministry of his two friends Habietenck and Shaeffle, such a storm of disapproval arose from the crowd that "his excellence," after a moment's expostulation with minister Beust, seized his hat, and with angry mien rushed from the hall. The air was immediately rent with "Down with Jirizek!" "Pereat Jirizek!" till he was out of hearing, when the cries changed to "Vivat Beust," the popular protestant prime minister. Thus ended such an expression of feeling as was rarely if ever before witnessed within the ancient Aula of the University, and one that called forth universal approval from all who understood the grievances that gave rise to it. The students' wish has been gratified; for Jirizek is down, he has perished; but unfortunately their champion, Beust, has also been super-

seded by the President of the Hungarian Cabinet, Count Andrassy, and is now on his way to London as Ambassador to the Court of St. James. The students proposed to have a torchlight procession, in honor of the departing premier, and only with great reluctance gave up the idea, in compliance with his solicitations, expressed to the students in a special reception accorded to them. The other crying grievance of the hour, known as the Karsten affair (which you will remember as that of the Professor of Botany, who, at the last rigorosum, rejected in his department ninety per cent. of the applicants for medical degree, and thereby obliged them to pass all of their examinations again), is finally settled by the Dekan's announcement that this professor will not be invited to attend the next examination, an omission made possible by the fact of there being two examiners in each branch. To this step he was driven by the refusal of the old ministry to take cognizance of the affair.

J. R. C.

INSTRUMENTAL TREATMENT OF DIFFICULT LABORS.—Dr. G. H. Kidd, President of the Dublin Obstetrical Society, in his recent address, entered at length into the question of this subject, illustrating his remarks by statistics based on the practice of the Rotunda Lying-in Hospital during the past eighty years. Dr. Joseph Clarke, who was master from 1787 to 1793, used the forceps but once in each 728 cases. As a contrast, in the three years during which Dr. G. Johnson has now been master, he has employed the forceps once in 14.74 cases. The mortality of the mothers after tedious and difficult labors has fallen from 20.21 per cent. in Clarke's time to 7.38 per cent. of the present; and of those delivered with the forceps, from 50 to 6.86 per cent. Again, of children born by the aid of the forceps, the mortality had in the same period fallen from 50 to 4.9 per cent. That the use of the forceps was the cause of vesico-vaginal fistula, Dr. Kidd believed to be quite unfounded; on the contrary, this unfortunate accident generally resulted from not using the instrument. Though the use of the perforator and the practice of embryotomy had recently been reduced to a minimum, great advances had been made in the construction of the instrument required in the performance of this operation. In another class of labors, that of transverse presentations, mechanical skill had also done much to overcome most serious difficulties.—*Brit. Med. Journal.*

Medical Miscellany.

At the regular quarterly meeting of the Middlesex North District Medical Society, held Jan. 24th, 1872 (in Lowell), the following preamble and resolution were unanimously adopted:—

Whereas, In cities and large communities of people, it becomes necessary, for the sake of self-preservation in case of exposure to disease or epidemics, to establish Boards of Health having special care of this department of public welfare,

Resolved, That in the opinion of this Society, the members of the medical profession should always be represented in such Boards; that it is due no less as a matter of courtesy to a body of men whose education and business are so closely identified with all sanitary matters, than that the public health cannot be so properly subverted without such recognition.

GEO. H. PILLSBURY,
Secretary.

THE PITTSFIELD MEDICAL ASSOCIATION, comprising all the regular practitioners of Pittsfield, was organized January 10th, at the house of Dr. Padlock. Meetings of a medico-social character are to be held every Wednesday evening, at the houses of the members in rotation. The Association begins with nine members, and has subscribed for a dozen of the best medical journals. President, Dr. A. M. Smith; Secretary and Treasurer, Dr. J. F. A. Adams.

DR. HENRY D. BULKLEY.—The medical profession in New York have lost an eminent associate in Dr. Bulkley, whose death took place on the 4th instant. He was born in 1804, at New Haven, Conn., received his medical education at Yale College, and practised medicine in New York for more than forty years. Eminent as a dermatologist, zealous as a lecturer and teacher, esteemed as practitioner, citizen and friend, he has closed a life which has been devoted to the good of mankind and the advancement of scientific medicine.

THE JOURNAL IN VIENNA.—Our American correspondents and friends in Vienna will find the JOURNAL on file each week at the reading room of the Hospital.

ADULTERATION OF TEA.—The *Pharmaceutical Journal* (London) states that the Chinese adulteration of tea with the willow leaf is becoming an extensive trade. The cultivation of the willow for this purpose commenced ten years ago, in Shanghai, and has increased from year to year. The flavor of the willow leaf has no resemblance to tea. An intermixture of 10 to 20 p. ct. of the adulterant is practised; and it has been estimated that 400,000 lbs. of willow leaf were so used last year. The character of the impurity has not been investigated with reference to its detection.—*Mich. University Med. Journal*.

THE CULTIVATION OF THE CINCHONAS.—The *Pharm. Jour. and Trans.* notices accounts of cinchona cultivation at various points in the East Indies, in Jamaica, and in St. Helena, showing

satisfactory results wherever the plant has been introduced. The bark from the hill districts of India assays with as good a result as the average South American. At the end of the present year, about 220 acres, in Jamaica, will be covered with cinchona plants. Upon 40 acres, the plants have reached the height of two or three feet.—*Ibid*.

NOTICE.—Our subscribers will oblige us by remembering that letters relating to Editorial matters should be addressed to the Editors; those relating to business, to the Publishers.

TO CORRESPONDENTS.—Communications accepted.—Case of Lead Palsy caused by the use of a Hair Preparation.

PAMPHLETS RECEIVED.—Massachusetts Institute of Technology. Seventh Annual Catalogue of the Officers and Students, and Programme of the Course of Instruction. 1871-72. Pp. 64.—Transactions of the Wisconsin State Medical Society for 1871. Vol. V. Pp. 197. (From J. T. Reeve, M.D., Secretary.)—The Illustrated Annual of Phenology and Physiognomy. By S. R. Wells, Editor of the Phenological Journal and Life Illustrated. Pp. 72.

DIED.—In Castleton, Vt., Joseph Perkins, M.D., aged 73. Dr. P. was for many years Professor of Materia Medica and President of the Trustees in Castleton Medical College, afterwards Professor in the University of Vermont; was one of the founders and several years President of the Vermont State Medical Society, and has long been looked upon as one of the most skilful and beloved of physicians.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Jan. 27, 1872.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	137	Consumption 55
Charlestown	4	Pneumonia 32
Worcester	21	Scarlet fever 9
Lowell	18	Croup and Diphtheria 7
Milford	1	
Chelsea	5	
Cambridge	11	
Salem	13	
Lawrence	10	
Springfield	7	
Lynn	7	
Gloucester	6	
Newburyport	3	
Somerville	3	
Fall River	18	
Haverhill	1	
Holyoke	4	

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GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Jan. 27th, 1872. Males, 71; females, 66. Accident, 4—apoplexy, 2—inflammation of the bowels, 2—bronchitis, 3—congestion of the brain, 2—disease of the brain, 6—cancer, 3—colic, 1—chorea, 1—consumption, 27—convulsions, 5—croup, 3—debility, 9—dropsy, 1—dropsy of the brain, 1—dyspepsia, 1—diphtheria, 1—erysipelas, 2—scarlet fever, 3—gangrene, 1—disease of heart, 7—hemorrhage, 1—homicide, 1—intemperance, 2—disease of the kidneys, 5—congestion of the lungs, 1—inflammation of the lungs, 14—marasmus, 1—old age, 3—pyæmia, 1—paralysis, 2—pleurisy, 1—premature birth, 5—peritonitis, 1—rheumatism, 3—scrofula, 1—suicide, 1—syphilis, 1—disease of spine, 1—tumor, 1—whooping cough, 1—unknown, 5

Under 5 years of age, 45—between 5 and 20 years, 15—between 20 and 40 years, 35—between 40 and 60 years, 21—above 60 years (including one, 102 years), 21. Born in the United States, 87—Ireland, 37—other places, 13.